Sugarland’s Kristian Bush on Writing, Recording, and Pitching Songs

Your Songs—Take The Next Step!
Creating Songs That Sell—The Pros Show You How

- Successful Strategies For Songwriters
- What You Should Do In Your Studio
- Song Pitch Techniques That Really Work
- and more!

Dynamic Processors—Taking Control Of Your Audio

7 New Products Reviewed

Apple Logic Pro X • DPA Microphones d:facto II Handheld Vocal Microphone
Focal Spirit Professional Headphones • Millennia Media NSEQ-4 Equalizer
Universal Audio NSEQ-2 Equalizer Plug-in for UAD-2 and Apollo
Yamaha HS7 Monitors And HS8S Subwoofer
DPA Microphones d:facto II

Handheld Vocal Microphone

New options in sound quality and application flexibility grace this lovely handheld mic

2010) and the d:dictate MMP/2000 modular system of interchangeable amplifier bodies and capsules (February 2013) to the d:line headset models (May 2013), DPA products are known in the industry for clarity, purity of sound and realism.

In 2012 DPA Microphones decided to add a vocal-specific hand-held model to its line, known as the d:facto. DPA was quick to follow it up with an improved model in 2013 called the d:facto II, and it was this version that I got to work with on stage and in the studio for several months. From what I can tell, between 2012’s NAMM press conference and 2013, DPA made some refinements, most notably how the microphone system assembles and disassembles.

d:ssassembly

Disassembly? The d:facto II follows in the footsteps of the company’s d:dictate line and is a completely modular design that can even make use of the company’s 2000 and 4000 series capsules.

Further adding to the modularity, the microphone is available as a standard wired handheld microphone, or as a head-style unit with various terminations for use with pretty much all the popular wireless systems (see below).

While not a new idea, since many companies offer wireless variants of their handheld models, the d:facto II is different. Usually you must choose which format you want to buy a microphone in, be it wired or wireless, and then you have to purchase a second version of the same mic should you need a differing format. The d:facto II is a flexible all-in-one solution where you buy a capsule and windscreen assembly along with an initial choice of four different wireless adaptors or the wired body. You can then add other wireless adaptors or the wired body as your needs grow or change.

Since, as I mentioned above, the d:facto II body and stock capsule are cross-compatible with the bodies and capsules of the d:dictate line, the possibilities are vast, but before we go there we will just focus on the stock d:facto II system.

d:facts

Each package, wired or wireless, comes in a DPA hard nylon zipper case. The windscreens/capsule assembly is the same for each variation, and from the outside looks like your standard black metal mesh head found on 99% of handheld fare.

Inside, however, it uses a triple-layer screening that includes a tight rigid cylindrical mesh that fits snugly around the capsule. This layered mesh design is closer in nature to what you’d find inside a large-diaphragm studio mic than your average foam lined metal grille, and as such it does not have a pinched or pilyow sound like many handheld vocal mics. Also, since it does not use foam or nylon webbing, it is easier to wash and dry—important for a heavily used handheld mic!

d:uild

The wired version is roughly 8" by 2" at its widest point and features a slightly textured matte black finish. This makes it easy to grip and helps lessen handling noise. The wireless head-assembly version measures 3½" x 2½", with a small metal ring whose finish matches the handheld version.

Inside the wind screen is a newly designed 4018V supercardioid capsule, developed for this system. It screws onto a brass assembly with a thick rubber internal shock mounting ring to further reduce handling noise from dancing vocalists and stage vibrations alike.

d:options

Each wireless capsule assembly is the same, but makes use of different terminations. The currently available adaptors are:

~ S1 which works with Shure, Sony and Lectrosonics v1 systems including Line 6.
~ SE2-e for Sennheiser 5000, 9000 and evolution wireless systems
~ SE5 for the Sennheiser 5000 series
~ W12 for Wiscom v2 systems

d:specs

The 4018V capsule is a pressure gradient, pre-polarized electret condenser with the following factory-supplied specs: 20 Hz to 20 kHz frequency response (more specifically, DPA quotes 100 Hz to 16 kHz ±2 dB at 12 cm distance with a 3 dB soft boost at 12 kHz), 75 dB signal to noise ratio; 5 mV/Pa; –46 dB ref. 1 V/Pa Sensitivity (±2 dB at 1 kHz), and 160 dB Max SPL level for even the most over-the-top screamer.

Like most DPA capsules the mic is flat from 20 Hz to 6 kHz, where it has what DPA calls a “soft rise” up to 12 kHz, beyond which it then tapers back down. Also inherent in this mic’s sound is a built-in ~3 dB @ 80 Hz highpass filter to get rid of low rumble. The d:dictate MMP-B amplifier body also offers this feature, but it is switchable.

d:phantom

The specs of the mic are the same, whether wired or wireless, which highlights another of the d:facto II’s engineering feats. Since this is a condenser mic, the handheld version uses 48V phantom power. In a wireless system most bodies are powered by 9V batteries, of which about 3V goes to the capsule. The d:facto II wireless bodies use a step-up transformer to give the capsule the full voltage it wants to see. DPA uses similar technology in its d:vote mics, which make use of the company’s microdot adaptors that
can also be used wired or wirelessly with a variety of body packs.

The only difference I experienced between the sound of the wired body and the SL-1 adaptor I was sent for my Shure U87-Pro system was that the wireless system was a tad lower in output and a bit noisier, but this was the wireless system and not the microphone, and the difference was slight.

d:workload

I used the d:facto II wirelessly live for a few months and wired in my studio. The easiest way to describe this mic is: gently forward, and clear as a bell. On stage it pushes the vocals effortlessly through the mix with a natural clarity. Due to its tight supercardioid pattern I had zero issues with feedback, and it also did well to minimize other instruments on stage like the drums and guitars.

In the studio I used it on a few sessions where the performer needed to sing at the same time as tracking their acoustic guitar part for feel. While I originally intended these to be only scratch vocals, the tone of the vocal was so close to the clarity of many of my large-diaphragm studio mics that it rivaled them in the final vocal mix. It also did a fine job of minimizing bleed from the acoustic guitar and did not highlight the room sound at all.

The d:facto II tone is very consistent. It has a very tight, sharp off-axis rejection and very little proximity effect, even if the singer eats the mic. This is presumably due to the mic’s built-in highpass filter; it is quite different than my experiences with other high-end vocal hand-helds, like Shure’s KSM9 and the Earthworks SR40V, both of which thicken up in tone as a singer gets right up on them. Not better or worse, just different, depending on the sound one is after. As you would expect from DPA, this is a mic that adds almost nothing to the sound of the vocalist, no high hype, no woof, no thickness.

d:othercapsules

Using the d:facto II with a DPA 2006 twin diaphragm omni capsule makes the mic ultra wide with almost zero off-axis rejection—as such, well suited for choir and small vocal groups. One caveat, however: in my opinion this configuration is good for distance work and room mic duties only. If you treat it as a normal up-close vocal mic with this capsule it’s very bright and sibilant.

I also tried it with one of DPA’s 2011 twin diaphragm cardioid capsules. Unfortunately this capsule is too tall to screw the windscreen back on, so I placed it over the capsule and just rested it there for test purposes. This setup had a rich low-end proximity effect and a nice smooth off-axis rejection. It’s a very luxurious sound, and I am curious if DPA’s smaller MMC4011 cardioid capsule, which would fit in the windscreen assembly, would be a nice cardioid option for this mic. I am guessing it would, as the 4018V was based upon the 4011, as per the 2012 NAMM press conference.

d:ingersonwriter

This leads me to my last thought on the d:facto II microphone. I think DPA may have stumbled upon the perfect microphone system for the professional singer/songwriter!

The d:facto II can travel from gig to gig as a personal vocal mic, wired or wireless, and then come back home where it is perfect wired, to achieve high-quality vocal takes for your songwriting sessions, demos and even a final album. Since it’s a standard DPA mic in handheld clothing, it can also be very well suited to tracking acoustic guitar and percussion.

While a supercardioid pattern is not most engineers’ choice for most instrument recording, for the home-based songwriter whose room may be problematic it’s actually perfect. It focuses on the voice and the instrument and not the room.

d:end

At $899.95 this is definitely a high-end option for a vocal mic, but once you hear it, it will be hard to go back to anything in a lesser category. I also appreciate the simple price structure DPA offer. It’s easy to budget what you need to expand your system, and the combination of pristine quality and ultimate flexibility just can’t be beaten.

Price: $899.95; additional bodies/adaptors $249.95 each


Paul Vnuk Jr. (vnuk@recordingmag.com) is a recording engineer, producer, sound designer, and live sound engineer, living and working in Milwaukee. He loves it when his studio gear makes his life easier on stage, too.